(19) World Intellectual Property Organization International Bureau



548 450

! DEELE EULEDE IN EURINE HEN EERST EUSS EEN DE 11 EUS EEU 16 EUR EEST EULE TEEN EEU EULE EUR EUR EUR EUR EUR E

(43) International Publication Date 7 October 2004 (07.10.2004)

PCT

(10) International Publication Number WO 2004/085770 A2

(51) International Patent Classification7:

E05B

(21) International Application Number:

PCT/US2004/007447

(22) International Filing Date: 10 March 2004 (10.03.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/454,185

10 March 2003 (10.03.2003) US

(71) Applicant and

(72) Inventor: WYERS, Philip, W. [US/US]; 14705 E. Arberdeen Avenue, Centennial, CO 80016 (US).

(74) Agents: MARTIN, Timothy, J. et al.; Timothy J. Martin, P.C., 9250 W. 5th Avenue, Suite 200, Lakewood, CO 80226 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

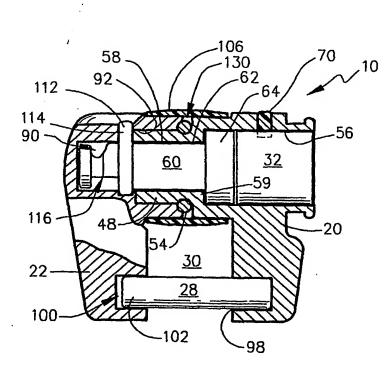
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LOCKING DEVICE



(57) Abstract: A locking device includes a first and second body members that may optionally include laterally projecting A retainer element has end portions respectively received in the interiors of the first and second body members and mechanically links them longitudinal movement between collapsed and expanded orientations. The retainer element also moves between a retain position and a release position that respectively secure the body members in the collapsed orientation and allows them to move to the expanded orientation. A lock core is operative to engage the retainer element. In a locked state, the lock core holds the retainer element in the retain position and in an unlocked state that moves the retainer element to the release position. A shackle may extend between arms on the first and second body members in order to enclose a locking region when the bodies are in the collapsed orientation.